How does a self-driving car see?

AUTONOMOUS SYSTEMS MCTR 1002

TEAM 4

Locomotion is the ability of the car to move controlling the car's speed and acceleration The goal is to develop an autonomous vehicle that can move in a straight line and avoid obstacles using ROS on an embedded raspberry pi 4

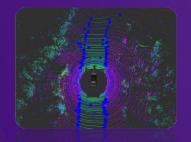




around, accelerate, brake, and steer

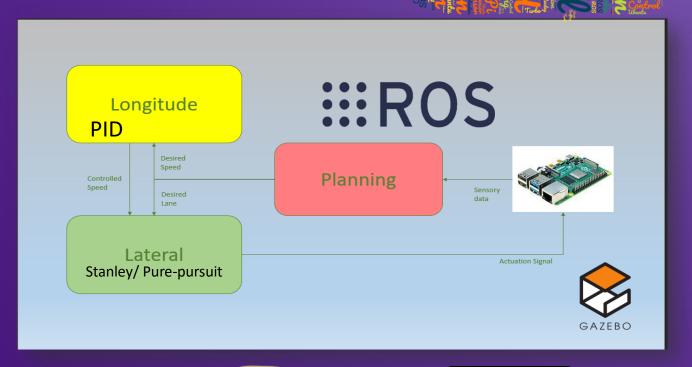
Localization is the ability of the car to know where it is in its environment by using a variety of sensors, including GPS, cameras, and LiDAR

Mapping is the ability of the car to create a map of its environment. to plan its path and avoid obstacles.





is the ability of the car to follow its planned path using a variety of sensors and actuators, including steering, braking, and acceleration.



Path planning is the process of finding a safe and efficient path for the car to follow by taking into account the car's current location, the environment, and the car's goals.







